

EPCOS Product Brief 2022

Multiple Pulse (MP) Disk Varistors, Compact S14 Series

For the Protection of Consumer and Industrial Power Supplies

Metal oxide varistors of the newly developed MP series are designed to be used in power supplies as the primary protection against low-level repetitive surge currents.

Their optimized design results in an improved derating performance over time compared to standard varistor series.

These protective components are particularly suited for applications in which repetitive surges are now specified by regulatory authorities in switch-mode power supplies, drives and general overvoltage protection modules.

The extensive range which is already recognized by UL as

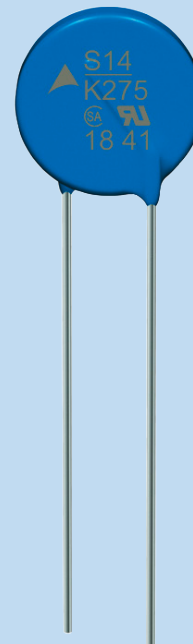
type 5 SPD components, respectively, and by VDE to Annex Q of IEC 60950-1 cover all standard voltage supply ratings.

AdvancedD-MP compact series

- AC voltage range from 130 to 460 V AC
- UL 1449, 4th edition, type 5 listed
- Tested in accordance to IEC 61051-2, VDE certified
- In accordance to:
 - IEC 60950-1; Annex Q
 - IEC 62368-1; G.8.2.

Options

- Kinked version upon request
- Customized cut leads available upon request



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2251K101	2271K101	2301K101	2321K101	2351K101	2381K101	2421K101	2461K101
250E2K55	275E2K55	300E2K55	320E2K55	350E2K55	385E2K55	420E2K55	460E2K55
13.0	13.0	13.0	13.0	13.0	14.0	14.0	14.0
17.0	17.0	17.0	17.0	17.0	18.0	18.0	18.0
5.7	5.9	6.1	6.3	6.7	7.7	8.2	8.5
3.0	3.2	3.5	3.7	3.9	4.2	4.5	4.7
250	275	300	320	350	385	420	460
320	350	385	420	460	505	560	615
6000	6000	6000	6000	6000	6000	6000	6000
3000	3000	3000	3000	3000	3000	3000	3000
115	130	140	150	165	180	190	200
0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
390	430	470	510	560	620	680	750
±10	±10	±10	±10	±10	±10	±10	±10
650	710	775	840	910	1025	1120	1240
50	50	50	50	50	50	50	50
420	380	350	320	295	280	255	230

Symbols and terms

Symbol	Term	Symbol	Term
C	Capacitance	V_{clamp}	Clamping voltage
C_{typ}	Typical capacitance	$V_{\text{c, max}}$	Maximum clamping voltage at specified current i_c
i	Current	V_{DC}	DC operating voltage
i_c	Current at which $v_{\text{c, max}}$ is measured	v_{max}	Maximum voltage
i_{max}	Maximum surge current (also termed peak current)	V_{RMS}	AC operating voltage, root-mean-square value
I_n	Nominal discharge current	V_v	Varistor voltage
P_{max}	Maximum average power dissipation	ΔV_v	Tolerance of varistor voltage
T_A	Ambient temperature	W_{max}	Maximum energy absorption
v	Voltage	e	Lead spacing

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